HIGHLIGHTS

REVISION NO. 33 Jun 01/10

Pages which have been revised are outlined below, together with the Highlights of the Revision

CH/SE/SU PAGES	C	REASON FOR CHANGE	EFFECTIVITY
CHAPTER 07			
L.E.P. 1- 1		Revised to Reflect this revision indicating new,revised, and/or deleted pages	
T. OF C. 1		Revised to reflect this revision	
07-11-00		Minor additions and amplification	
1- 8		**REVISED TEXT AND CAUTION:** **- ADDED TWO NEW CAUTIONS.**	
07-12-00		Minor additions and amplification	
1, 4		**REVISED STABILITY WARNING AND ADDED NOTE.**	

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CHAPTER 07

LIFTING & SHORING

LIST OF EFFECTIVE PAGES

N, R or D indicates pages which are New, Revised or Deleted respectively
Remove and insert the affected pages and complete the Record of Revisions and the Record of Temporary Revisions as necessary

CH/SE/SU	C	PAGE	DATE	CH/SE/SU	C	PAGE	DATE	CH/SE/SU	C	PAGE	DATE
RECORD OF TEMP. REVISION											
L.E.P.	R	1- 1	Jun01/10								
T. of C.	R	1	Jun01/10								
07-00-00		1	Dec01/90								
07-00-00		2	Dec01/90								
07-11-00	R	1	Jun01/10								
07-11-00	R	2	Jun01/10								
07-11-00	R	3	Jun01/10								
07-11-00	R	4	Jun01/10								
07-11-00	R	5	Jun01/10								
07-11-00	R	6	Jun01/10								
07-11-00	R	7	Jun01/10								
07-11-00	N	8	Jun01/10								
07-12-00	R	1	Jun01/10								
07-12-00		2	Dec01/90								
07-12-00		3	Jun01/96								
07-12-00	R	4	Jun01/10								
07-12-00		5	Jun01/06								
07-12-00		6	Dec01/90								
07-12-00		7	Jun01/06								
07-20-00		1	Jun01/04								
07-20-00		2	Jun01/04								
07-30-00		1	Dec01/90								

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CHAPTER 07

LIFTING & SHORING

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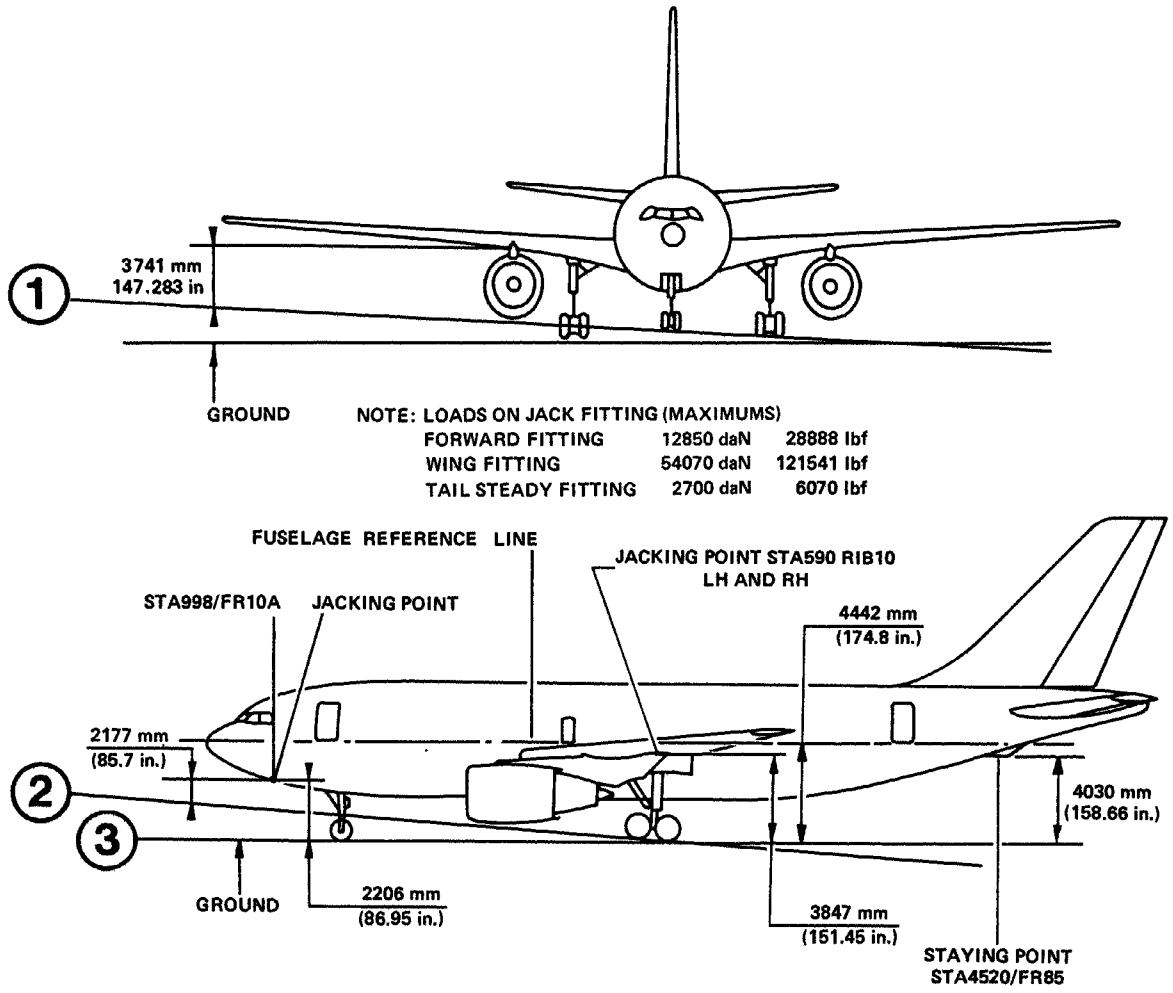
General			1	ALL
Procedure			4	ALL
JACKING FOR WHEEL CHANGE	07-12-00			
General			1	ALL
RH or LH Main Gear Lifting			1	ALL
Nose Gear Lifting			5	ALL
SHORING	07-20-00			
EMERGENCY LIFTING AND SHORING	07-30-00			
General			1	ALL

1. General

A. Two cases may be considered for lifting the aircraft :
- Lifting and jacking in the case of maintenance operations (Ref. 07-11-00).
- Lifting for nose and main gear wheel change (Ref. 07-12-00).

B. Jacking Point Height Under Various Configurations Figure (Ref. Fig. 001)



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Clearances Between Jacking Points and Ground
Figure 001

JACKING FOR AIRCRAFT MAINTENANCE OPERATION

WARNING : PRIOR TO JACKING, FUEL LOAD SHALL BE EVENLY DISTRIBUTED ABOUT AIRCRAFT CENTERLINE (REF. 28-25-00, P. BLOCK 1).
PRIOR TO JACKING OUTSIDE HANGAR, POSITION AIRCRAFT NOSE-INTO WIND.

1. General

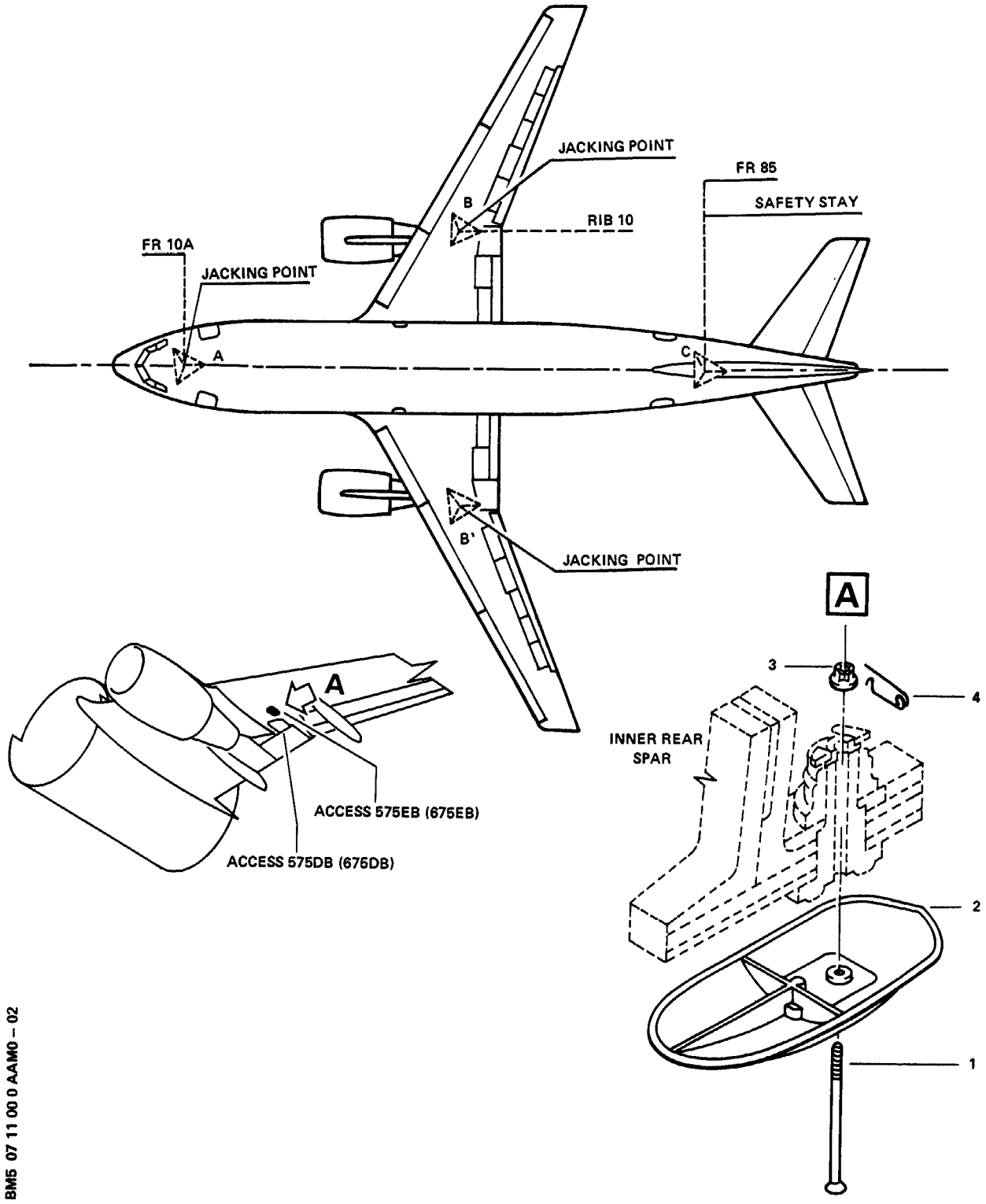
R Aircraft lifting is effected at three points on the structure by means of
R three jacks: the first located under the fuselage at FR10A and the other two
R under wing at RIB10, on LH and RH sides.
R With aircraft on jacks, position safety stay at FR85 to prevent accidental
R tail tipping, except for landing gear extension and retraction tests.
R **NOTE** : Jacking is possible under least favorable conditions, that is to say
R with flat tires and shock absorbers deflated.
R **NOTE** : It is possible to lift the aircraft at the forward jacking point, main
R gear wheels on the ground.
R **CAUTION : THE SAFETY STAY MUST NOT BE USED TO LIFT OR LOWER AIRCRAFT.**
CHECK STABILITY OF AIRCRAFT ON JACKS (Ref. 05-57-00, P. Block 1).
R **CAUTION : THE SAFETY STAY MUST ONLY BE POSITIONED WHEN THE AIRCRAFT**
R **IS LIFTED.**
R **CAUTION : FOR LANDING GEAR EXTENSION AND RETRACTION TESTS, THE SAFETY**
R **STAY MUST NOT BE INSTALLED. DAMAGE CAN OCCUR TO THE AIRCRAFT**
R **FUSELAGE WHEN THE AIRCRAFT MOVES DURING THE TESTS.**
R **CAUTION : BEFORE YOU LIFT OR YOU LOWER THE AIRCRAFT, MAKE SURE THAT**
R **THERE IS NO EQUIPMENT ADJACENT TO THE AIRCRAFT (THAT CAN CAUSE**
R **DAMAGE). MAKE SURE THAT NO OTHER WORK IS BEING DONE.**

(Ref. Fig. 001)
(Ref. Fig. 002)

2. Equipment and Materials

Hydraulic Jack data	Force (min)	Height (jack retracted)	Adjustment travel (1)
Fwd Jacking Point	20.000 daN (44962 lbf)	2 m (78.74 in.)	1.3 m (51.18 in.)
Under Wing Jacking Point	70.000 daN (157366 lbf)	3.8 m (149.6 in.)	1 m (39.57 in.)
Safety Stay (FR85)	5.000 daN (11240 lbf)	4 m (157.48 in.)	0.85 m (33.46 in.)

NOTE 1 : Minimum adjustment to lift the A/C about 100 mm.
NOTE 2 : The special adapter must be used at RIB10
NOTE 3 : Load indicators must be provided on each jack. They will indicate loads on two reading scales, one graduated in bars (psi), the second in daN (lbf).



Jacking Point Location and Access
Figure 001

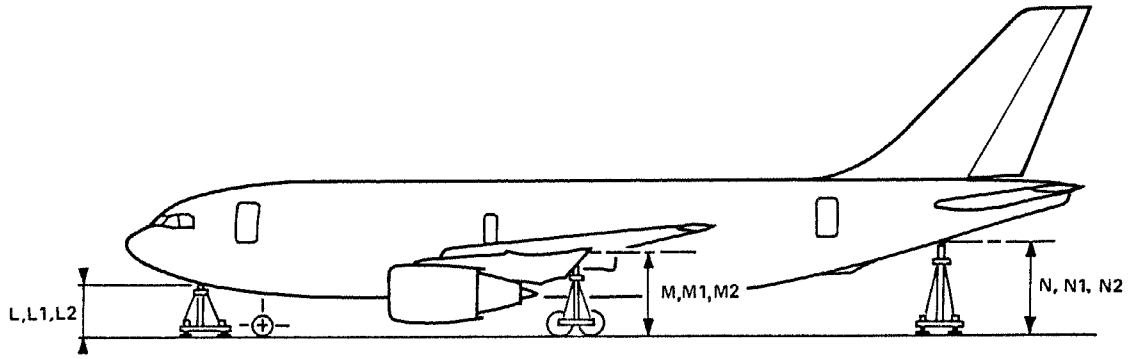
L,M,N : AIRPLANE ON WHEELS, SHOCK ABSORBERS DEFLATED AND FLAT TIRES

L1,M1,N1 : AIRPLANE ON JACKS, FUSELAGE REFERENCE PARALLEL TO GROUND, SHOCK ABSORBERS EXTENDED MAIN WEEL CLEARANCE (STANDARD TIRES) 100mm (3.9in)

L2,M2,N2 : AIRPLANE ON WHEELS, STANDARD TIRES (MAX JACK WEIGHT 125t 25% M.A.C.)

	L	L1	L2	M	M1	M2	N	N1	N2
mm	2206	3278	2504	3847	4808	4112	4030	4889	4265
in	86.85	129.06	98.58	151.46	189.29	161.89	158.66	192.48	167.91

NOTE: SAFETY STAY IS NOT USED FOR JACKING



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Jacking Point Height
Figure 002

ITEM	DESIGNATION
A. 98A07004003000	Wing Jack Pad (LH)
B. 98A07004003001	Wing Jack Pad (RH)
C. 98A07004002000	Jacking Adapter
D.	Warning Notices
E.	Access Platform 4 m (13 ft.)
Referenced Procedures	
- 05-57-00, P. Block 1	Aircraft Stability
- 08-21-00, P. Block 1	Quick Leveling
- 24-41-00, P. Block 301	AC External Power Control
- 28-25-00, P. Block 301	Refuel/Defuel System

3. Procedure

NOTE : Aircraft on wheels: for maximum jacking weight, refer to weight and balance manual.

A. Job Set-Up

WARNING : MAKE SURE THAT THE AIRCRAFT IS STABLE BEFORE YOU LIFT IT WITH JACKS. THE AIRCRAFT MUST STAY STABLE WHILE ON JACKS.

NOTE : When jacking aircraft for test purposes, make certain that electrical ground power unit is connected and the aircraft electrical network is energized (Ref. 24-41-00, P. Block 301).

(1)Position access platform.
(2)Remove FWD jacking point fairing 121CL.
(3)Removal of wing jacking point fairings (Ref. Fig. 001).
(a)Open access doors 575DB and 675DB.
(b)Remove retaining pins (4), nuts (3) and bolts (1).
(c)Remove fairings (2) 575EB and 675EB.
(4)Place Wing Jack Pads and jacking adapters at RIB 10 (RH and LH sides).
(5)Position the jacks at jacking points.

CAUTION : REMOVE WHEEL CHOCKS AND RELEASE BRAKES BEFORE OPERATING JACKS. REMOVE ALL THE GROUND EQUIPMENT, ACCESS PLATFORMS AND STEPLADDERS THAT COULD DAMAGE THE AIRCRAFT DURING LIFTING.

WARNING : WHEN JACKING AIRCRAFT FOR TEST PURPOSES WITH ELECTRICAL GROUND POWER UNIT CONNECTED, TAKE THE FOLLOWING PRECAUTIONS:

(6)Make certain that window heat, probe heat and wing anti-icing systems are deactivated.
(7)Open, safety and tag the circuit breakers for the following systems.

PANEL	SERVICE	IDENT.	LOCATION
21VU	STICK SHAKER/CAPT	12FU1	109/A 9
21VU	STICK SHAKER/F/O	12FU2	109/A10
21VU	AIDS/DFDR	7TU	/E02
21VU	QAR	54TU	/E04
21VU	AIDS/DFDAU	55TU	/E03
800VU	DRAIN MAST/FRONT	1DU	H09
811VU	DRAIN MAST	11DU	B18

(8)Open main gear doors (Ref. 32-12-11, P. Block 301).

(9)Install warning notices.
(10)Make sure that the passenger/crew doors, the emergency exits and cargo doors are closed and locked or fully open and locked.

B. Lifting and Jacking

R CAUTION : BEFORE YOU LIFT OR YOU LOWER THE AIRCRAFT, MAKE SURE THAT
R THERE IS NO EQUIPMENT ADJACENT TO THE AIRCRAFT (THAT CAN CAUSE
R DAMAGE). MAKE SURE THAT NO OTHER WORK IS BEING DONE.

(1)Jack up at forward jacking point in order to level A/C centerline. Check level using the clinometer located in the main landing gear well (Ref. 08-21-00, P. Block 1).
(2)Operate all the jacks simultaneously so as to have zero roll and pitch attitudes.
(3)As the jacks are operated, adjust the jack safety collar in order to avoid accidental collapse of the jacks.
NOTE : Make certain by means of the clinometer that leveling is correct (Ref. 08-21-00).
(4)Lift the aircraft until you get a minimum clearance of 120 mm (4.7224 in.) between the MLG wheels and the ground, taking care to remain within the operational limit of the jacks.
R (5)Place safety stay at FR85, STA5262, except when you perform landing gear
R extension and retraction tests.
R CAUTION : THE SAFETY STAY MUST ONLY BE POSITIONED WHEN THE AIRCRAFT
R IS LIFTED.
CAUTION : FOR LANDING GEAR EXTENSION AND RETRACTION TESTS, THE SAFETY STAY MUST NOT BE INSTALLED. DAMAGE CAN OCCUR TO THE AIRCRAFT FUSELAGE WHEN THE AIRCRAFT MOVES DURING THE TESTS.
NOTE : The aircraft electrical network being energized and the aircraft on jacks (shock absorbers extended), the relays in circuit with the proximity detectors cut off the supply to the ground busbars, thereby isolating the following circuits:

DETECTORS	RELAYS	SYSTEM	FUNCTION LOST
62GB	22GB	QC	Supply and Control (APU Bleed System)
		PR	Refueling - Power Supply
		LS	Equipment Compartment - Lighting
		LM	Gear Wells - Power Receptacles, Lighting
62GB	22GB	LJ	Section 19/APU Zone - Service Area Lighting
		LZ	Cabin Attendant Work Lights - Lighting
		MY	Cargo Conveyance System
		LL	Cargo Loading Area - Lighting
62GB	22GB	LU	Fwd - Aft - Bulk Cargo Compartment - Lighting
		LK	Air Conditioning Compartment Lighting
		MY	Cargo Loading
63GB	13GB	GC	Nose Wheel Steering
	59GB	GG	Brakes - Control and Indicating
55GB	98GB	GG	Brakes - Control and Indicating
82GB	14GB	GC	Nose Gear Wheel Steering

C. Reaction at Jacking Points
(1)Reaction at FR10a jacking point.
- Safe load at forward jacking point is 12850.daN (28888 lbf).
(2)Reactions at RIB10 jacking points, LH and RH sides.
- Safe load at RIB10 jacking point (LH and RH) is 57750.daN (129827 lbf).
NOTE : Longitudinal or lateral load resulting from a possible aircraft attitude = 0.33 safe load at jacking point.
(3)Reaction at tail steady point: 2700.daN (6070 lbf).

D. Restore Aircraft to Initial Configuration
WARNING : BEFORE LOWERING THE AIRCRAFT, MAKE CERTAIN THAT AREA UNDER THE AIRCRAFT IS CLEAR.

E. Before lowering the aircraft from jacks onto wheels:
(1)Make absolutely certain that the gears are downlocked:
WARNING : MAKE ABSOLUTELY CERTAIN THAT THE GEARS ARE DOWNLOCKED BY CHECKING THAT :
- GREEN RH, NOSE AND LH ARROW LIGHTS, ON LANDING GEAR AND DOOR INDICATING UNITS IN FLIGHT COMPARTMENT, ARE ON AND/ OR THAT MECHANICAL DOWNLOCK VISUAL INDICATORS CONFIRM DOWNLOCKING.
- INSTALL ALL SAFETY EQUIPMENT ON NOSE AND MAIN GEARS
- REMOVE SAFETY STAY
- MAKE CERTAIN THAT THE AIRCRAFT IS LEVEL THROUGHOUT THE LOWERING OPERATION.
(2)Make sure that the passenger/crew doors, the emergency exits and cargo doors are closed and locked or fully open and locked.
(3)All safety equipment on main and nose gear is installed.
WARNING : WHENEVER THE GROUND SAFETY PIN IS INSTALLED ON THE NOSE GEAR TELESCOPIC STRUT, ALWAYS VISUALLY CHECK THAT:
- IT HAS COMPLETELY AND EASILY ROTATED THE FORK-TYPE LEVER OF THE GROUND LOCKING SYSTEM
- ITS STOP FLANGE ABUTS AGAINST THE HOUSING OF THE TELESCOPIC STRUT LOCKING SYSTEM (FULL INSERTION).
WARNING : WHEN THE GROUND SAFETY PIN IS REMOVED, VISUALLY CHECK THE DOWN POSITION OF THE FORK-TYPE LEVER ON THE TELESCOPIC STRUT GROUND LOCKING SYSTEM.
- REMOVE SAFETY STAY.
(4)Unlock safety collar on each jack.
(5)Simultaneously operate the jacks to lower the aircraft. Make certain that the aircraft is level at all times during lowering.
(6)When jack heads are no longer in contact with jacking points on aircraft, remove the jacks.
(7)Apply parking brake and place wheel chocks if necessary.
(8)Position access platform.
(9)Remove jacking adapters and Wing Jack Pads from RIB10, LH and RH sides.
(10)Installation of wing jacking point fairings. (Ref. Fig. 001)
(a)Install fairings (2) 575EB and 675EB.
(b)Install bolts (1) and nuts (3). Torque nuts (3) and install retaining pins (4).
(c)Close access doors 575DB and 675DB.

(11)Install FWD jacking point fairing.
(12)Remove access platform.
(13)Close main gear doors (Ref. 32-12-11, P. Block 301).
(14)Remove warning notices.
(15)Remove safety clips and tags and close circuit breakers 12FU1, 12FU2, 54TU, 55TU, 1DU, 21DU, 11DU.

4. Lifting of the Aircraft at Forward Jacking Point;
Main Gear Wheels on the Ground

A. Lifting the Aircraft
(1)Position jack at jacking point.
WARNING : - VERTICAL LOAD AT FRAME 10A SHALL BE BETWEEN 2 AND 10 TONNES.
- MAKE CERTAIN THAT SAFETY PINS ARE INSTALLED ON NOSE AND MAIN LANDING GEARS.
R CAUTION : THE SAFETY STAY MUST ONLY BE POSITIONED WHEN THE AIRCRAFT
R IS LIFTED.
(2)Place PARKING BRAKE control handle in Normal (released) position.
(3)Remove chocks from main gear wheels.
(4)Make sure that the passenger/crew doors, the emergency exits and cargo doors are closed and locked or fully open and locked.
(5)Jack up the aircraft to obtain 60 mm (2.362 in.) nose wheel tire-to-ground clearance (shock absorber extended).
(6)Position safety stay at STA4520 (FR85).
(7)Chock main gear wheels.
(8)Place PARKING BRAKE control handle in "on" (applied) position.
R CAUTION : FOR LANDING GEAR EXTENSION AND RETRACTION TESTS, THE SAFETY
R STAY MUST NOT BE INSTALLED. DAMAGE CAN OCCUR TO THE AIRCRAFT
R FUSELAGE WHEN THE AIRCRAFT MOVES DURING THE TESTS.

B. Lowering the Aircraft
WARNING : MAKE CERTAIN THAT NOSE GEAR IS POSITIVELY DOWNLOCKED AND THAT SAFETY PIN IS INSTALLED.
R CAUTION : BEFORE YOU LIFT OR YOU LOWER THE AIRCRAFT, MAKE SURE
R THAT THERE IS NO EQUIPMENT ADJACENT TO IT (THAT CAN CAUSE DAMAGE)
R MAKE SURE THAT NO OTHER WORK IS BEING DONE.
(1)Place PARKING BRAKE control handle in Normal (released) position.
(2)Remove chocks from main gear wheels.
(3)Remove safety stay at STA4520 (FR85).
(4)Make sure that the passenger/crew doors, the emergency exits and cargo doors are closed and locked or fully open and locked.
(5)Lower the aircraft onto its nose wheels.
(6)Remove jack when jack head is no longer in contact with jacking point.
(7)Chock main gear wheels.
(8)Place PARKING BRAKE control handle in "on" (applied) position.

JACKING FOR WHEEL CHANGE

1. General

The aircraft can be lifted at its maximum take-off weight.

WARNING : CHECK THAT LANDING GEAR GROUND SAFETIES INCLUDING WHEEL CHOCKS ARE IN POSITION.

R WARNING : MAKE SURE THAT THE AIRCRAFT IS STABLE AND DOES NOT MOVE DURING THE
R JACKING OPERATIONS.
R IF THERE IS UNWANTED MOVEMENT OF THE AIRCRAFT, THE BALL CAN COME
R OFF THE JACK ADAPTER AND INJURY AND/OR DAMAGE CAN OCCUR.

CAUTION : CHECK STABILITY OF AIRCRAFT (Ref. 05-57-00, P. Block 1).

2. RH or LH Main Gear Lifting (Ref. Fig. 001)

NOTE : Whenever the four wheels of the RH or LH gear are to be changed, lifting is accomplished by means of two jacks. When the four tires of the same main landing gear burst, it is necessary to begin replacement operations by starting with the aft pair on the bogie.

A. Equipment and Materials

(1)Wheel changing jack data (tires inflated)
Force : 50 000 daN (112404 lbf)
Extended height 305 mm (12 in.)

(2)Wheel changing jack data (tires deflated)
Force : 40 000 daN (89923 lbf)
Min. height : 175 mm (6.8 in.)

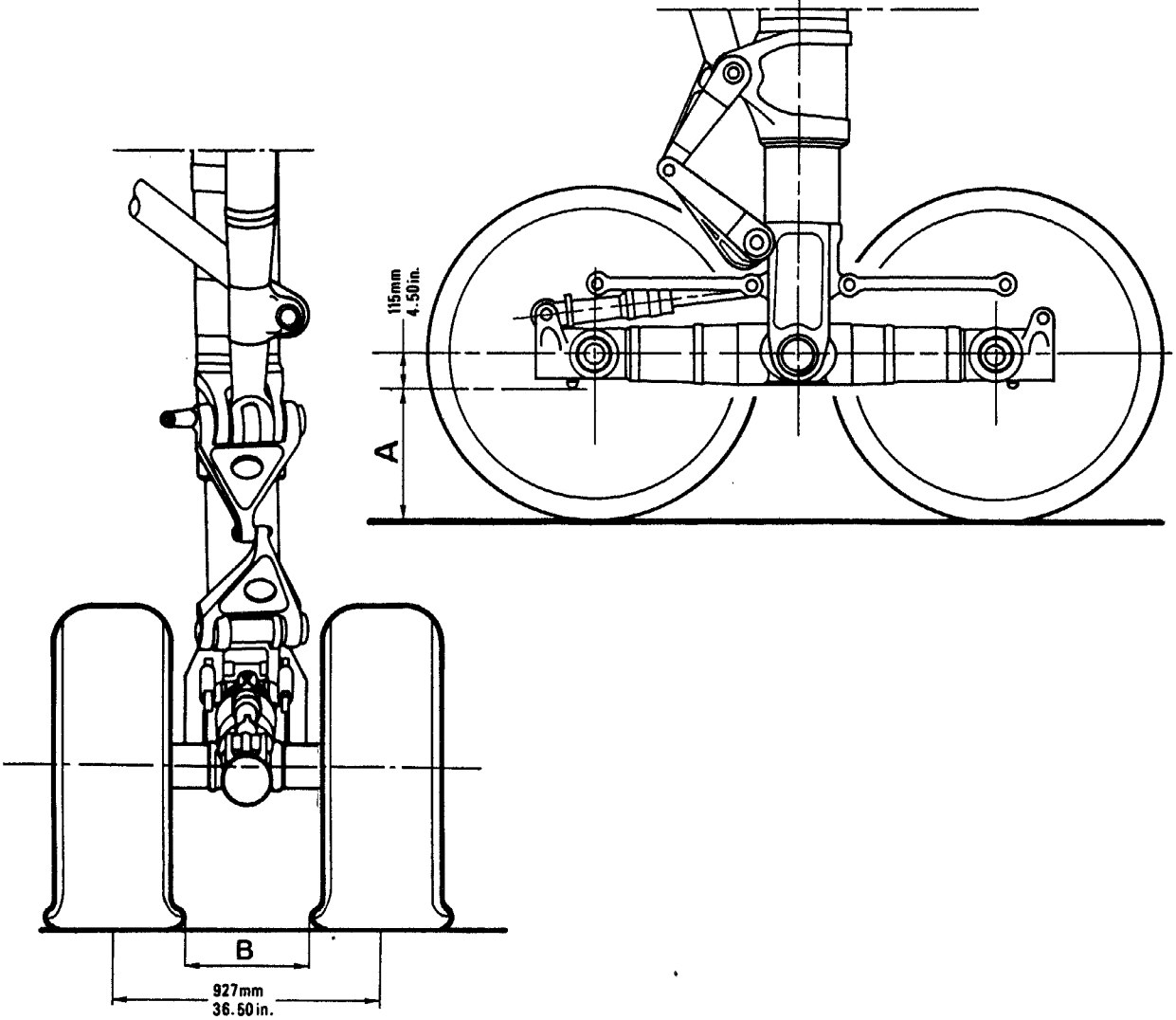
ITEM	DESIGNATION
(1)	Wheel Changing Jack - Nose and Main Gear (Tires Inflated)
(2)	Wheel Changing Jack - Nose and Main Gear (Tires Deflated)
(3)	Wheel Changing Equipment - Nose and Main Gear (Tires Burst)
(4)	Chocks - Wheel
(5)	Nose Gear Wheel Removable Chocks
Referenced Procedure - 05-57-00, P. Block 1	Aircraft Stability

B. Procedure

(1)Job set-up
(a)Make certain that parking brake is released.
(b)Make certain that there is no obstacle which could obstruct lifting.
(c)Position the wheel chocks.
(d)Check the bogie beam jacking ball pads and the jack spherical jacking pad for correct condition.
(Ref. Fig. 002)

C. Lifting

(1)Position the jack so that the jacking ball pad lines up with the



CONDITIONS	A				B			
	CG18%		CG 35%		CG18%		CG35%	
AIRPLANE AT MAX TAXI WEIGHT	mm	in	mm	in	mm	in	mm	in
TIRES NORMALY INFLATED	377	14.85	372	14.65	478	18.82	476	18.74
AIRPLANE AT MAX TAXI WEIGHT -BOTH TIRES FLAT -WHEEL RIMS	225 183	8.85 7.20	225 183	8.85 7.20	409	16.10	409	16.10
AIRPLANE ON JACKS-HIGH ENOUGH FOR TIRE CHANGE	> 477	> 18.80	> 477	> 18.80	505	19.90	505	19.90

NOTE : DIMENSIONS IN THE TABLE ABOVE ARE APPROXIMATE AND WILL VARY WITH TIRE TYPE AND CONDITIONS

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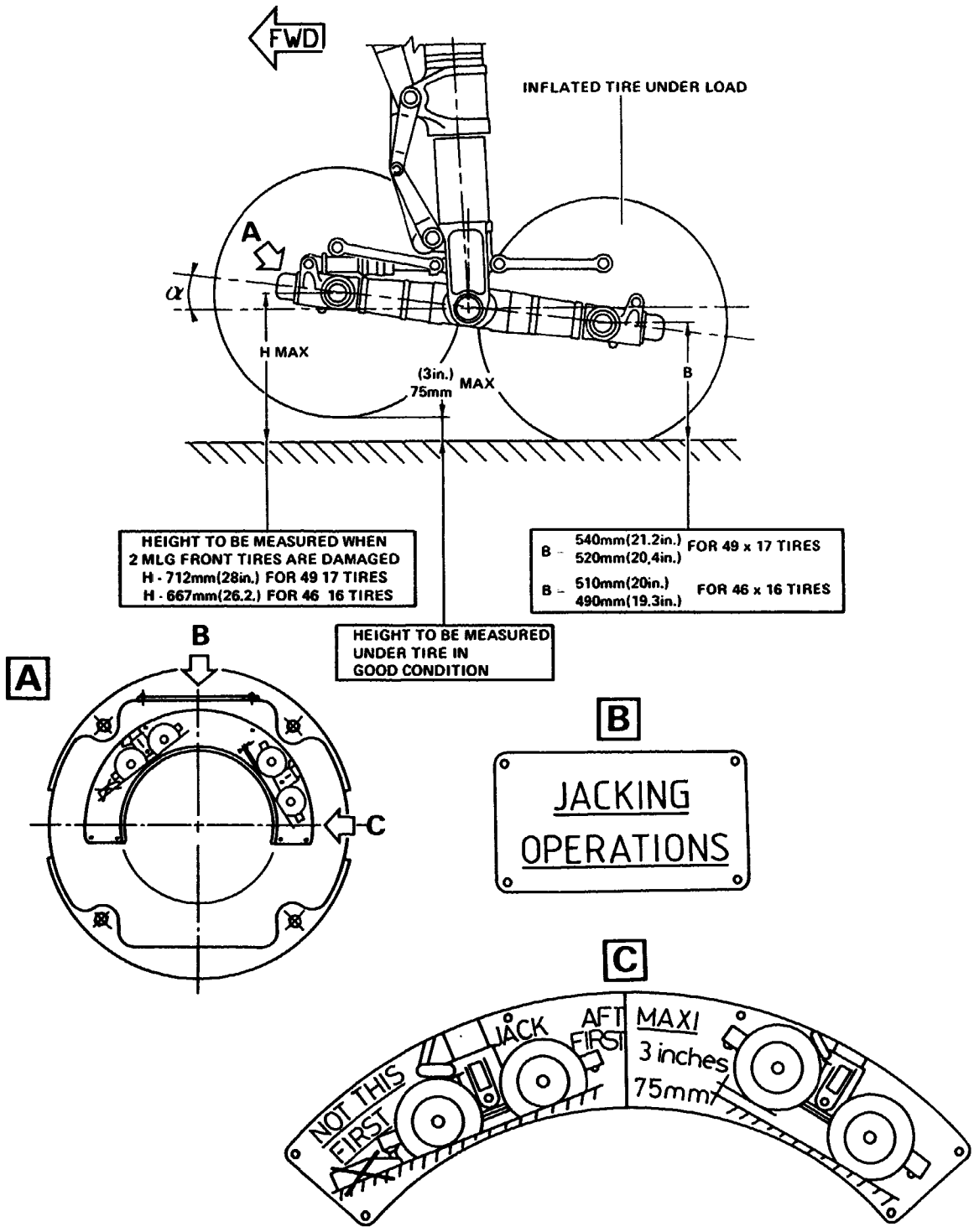
Main Gear Wheel Jacking Point
Figure 001



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Maximum Heights for Bogie Beam Lifting and Jacking Operations
Figure 002

R

spherical jacking pad,
CAUTION : INCORRECT POSITIONING OF JACK MAY RESULT IN IRREPARABLE DAMAGE TO BOGIE BEAM.
(2)Operate the jack adjustment screw in order to bring the spherical jacking pad and the jacking ball pad into contact.
(3)Check for correct seating of jack pad at jack.
(4)Operate the jack in order to lift the wheel clear of the ground.
CAUTION : PRIOR TO LIFTING BOGIE BEAM FOR REMOVAL OF MLG FRONT WHEELS TAKE THE FOLLOWING PRECAUTIONS.
R NOTE : The aircraft is not in stable configuration during a
R loading/unloading or a fueling operation.
R AIRBUS recommends that you do not do operations that can change
R the weight or stability of the aircraft during jacking (gate
R docking, fueling/defueling, loading/unloading, etc.).
Several cases can occur:
(a)Rear wheels on the ground properly inflated (Distance between the axle axis and the ground: 520 to 540 mm (20.4 to 21.2 in.) for 49 x 17 tires and 490 to 510 mm (19.3 to 20 in.) for 46 x 16 tires.
- One or two front wheels are to be replaced (tires not destroyed): The distance between the tire and the ground should not exceed 75 mm (3 in.).
- One front wheel is to be replaced (tire destroyed): The distance between the tire of the adjacent wheel and the ground should not exceed 75 mm (3 in.).
- Two front wheels are to be replaced (tires destroyed): In such a case, use the axle as a reference. The lifting distance between the axle axis and the ground should not exceed 712 mm (28 in.) for 49 x 17 tires and 667 (26.2 in) for 46 x 16 tires.
(b)The two front wheels and the two rear wheels are to be replaced: First replace the two rear wheels (an absolute requirement) and then replace the two front wheels, as indicated above.
NOTE : Maximum lifting heights indicated above include a safety clearance of approximately 25 mm (1 in.).

D. Lowering
(1)Slowly operate the jack hydraulic control in order to avoid an over-abrupt lowering of the aircraft onto its wheels.

E. Close-Up
(1)Apply the parking brake.

3. Nose Gear Lifting (Ref. Fig. 003, 004)
NOTE : Changing a wheel with a deflated or burst tire is performed by means of a jack adapter.

A. Equipment and Materials

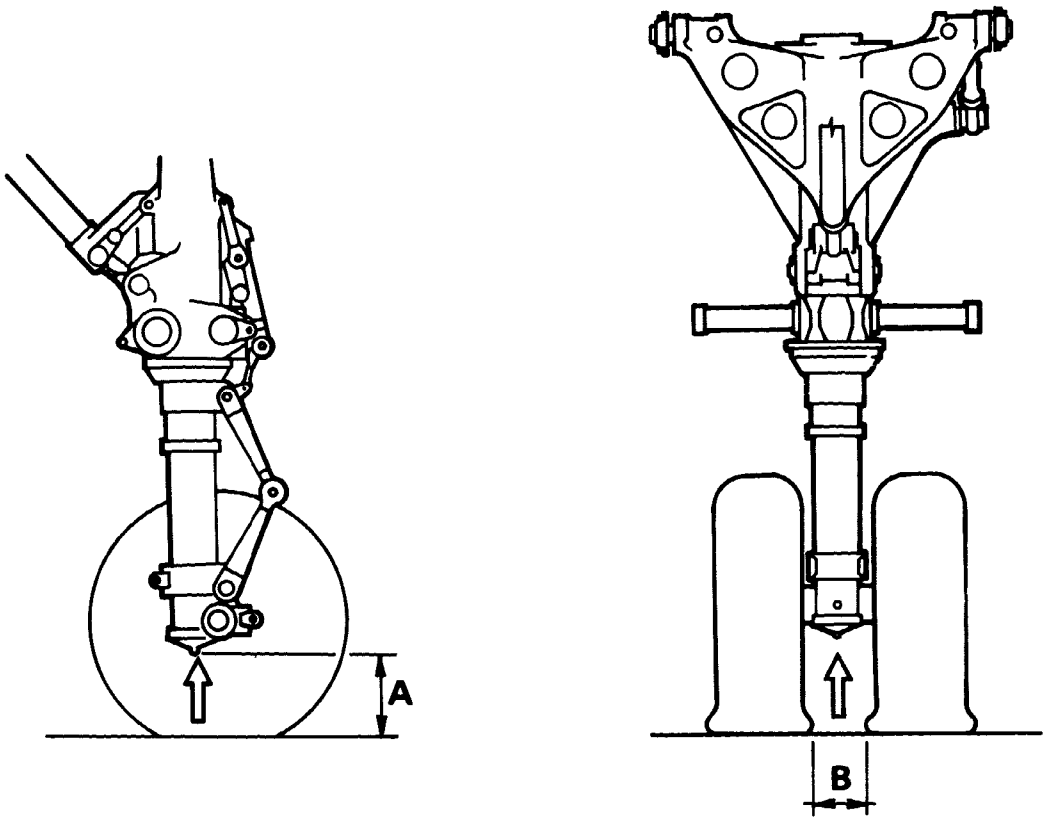
ITEM	DESIGNATION
(1)	Wheel Changing Jack - 50.000 daN (112404 lbf)
(2) C22971	Jack Adapter
(3)	Chocks - Wheel
(4)	Nose Gear Wheel Removable Chocks
Referenced Procedure - 05-57-00, P. Block 1	Aircraft Stability

B. Procedure
(1)Job set-up
(a)Make certain that the parking brake is released.
(b)Make certain that wheels are aligned.
(c)Make certain that there is no obstacle which could obstruct lifting.
(d)Check the jack adapter jacking ball pad and the jack spherical jacking pad for correct condition.
(e)Position the main gear wheel removable chocks.

C. Lifting
(1)If required, place the jack adapter ends one on the towing fitting, the other on the jacking ball pad of the gear sliding tube.
(2)Place the jack spherical jacking pad in line with the jack adapter jacking ball pad.
(3)Actuate the jack adjustment screw in order to bring the spherical jacking pad and the jacking ball pad into contact.
(4)Check for correct seating of jack pad at jack.
(5)Operate the jack in order to lift the wheel clear of the ground.
NOTE : When the jack adapter is not used, position the jack spherical jacking pad in line with the jacking ball pad integral with the sliding tube.

D. Lowering
(1)Slowly actuate the jack hydraulic control in order to avoid an over - abrupt lowering of the aircraft onto its wheels.

E. Close-Up
(1)Apply the parking brake and position the nose gear wheel removable chocks.



CONDITIONS	A				B			
	CG 18 %		CG 35%		CG 18 %		CG 35 %	
AIRPLANE AT MAX TAXI WEIGHT TIRES NORMALY INFLATED	mm	in	mm	in	mm	in	mm	in
	305	12	330	13	220	8.66	224	8.82
AIRPLANE AT MAX TAXI WEIGHT BOTH TIRES FLAT WHEEL RIMS	158 109	6.20 4.30	158 109	6.20 4.30	166	6.54	166	6.54
AIRPLANE ON JACKS HIGH ENOUGH FOR TIRE CHANGE	385	15.15	385	15.15	255	10.05	255	10.05

NOTE: DIMENSIONS IN THE TABLE ABOVE ARE APPROXIMATE AND WILL VARY TIRE AND CONDITIONS

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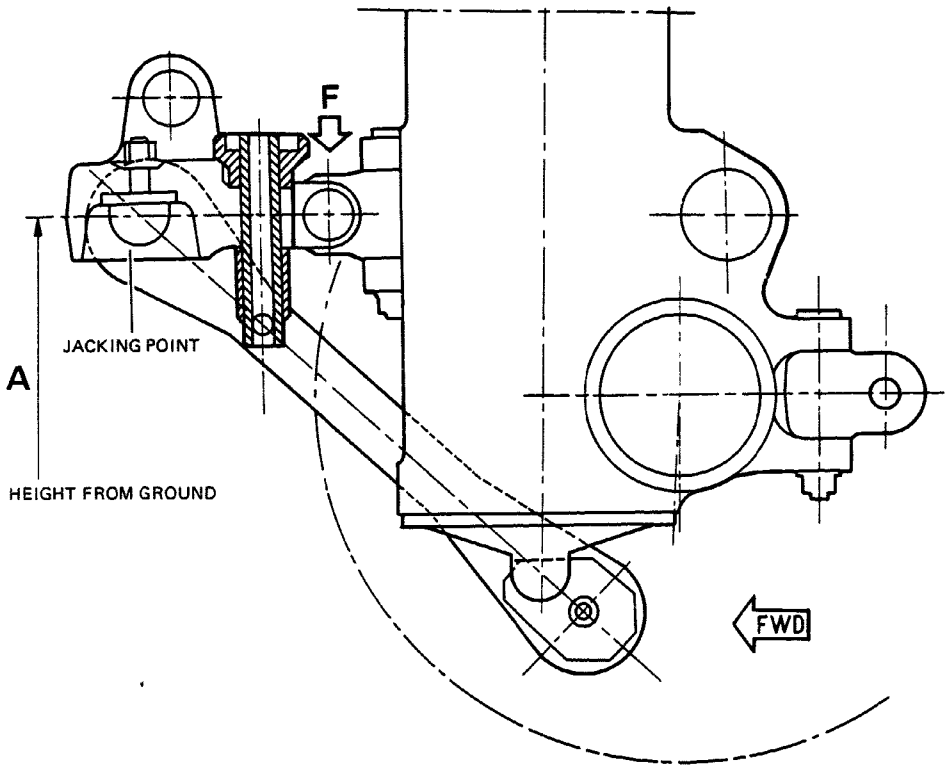
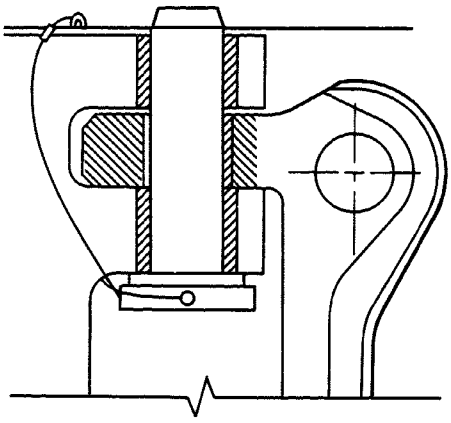
Nose Gear Wheel Jacking Point
Figure 003



PARTIAL VIEW ON ARROW FWD "F" TOWING ATTACHMENT

F



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CONDITIONS	A			
	CG18%		CG35%	
AIRPLANE AT MAX TAXI WEIGHT	mm	in	mm	in
TIRES NORMALLY INFLATED	566	22.30	591	23.25
AIRPLANE AT MAX TAXI WEIGHT ONE TIRE FLAT	516	20.30	566	22.30
AIRPLANE AT MAX TAXI WEIGHT BOTH TIRES FLAT	419	16.50	419	16.50
AIRPLANE ON JACKS HIGHT ENOUGH FOR TIRE CHANGE	646	25.45	646	25.45

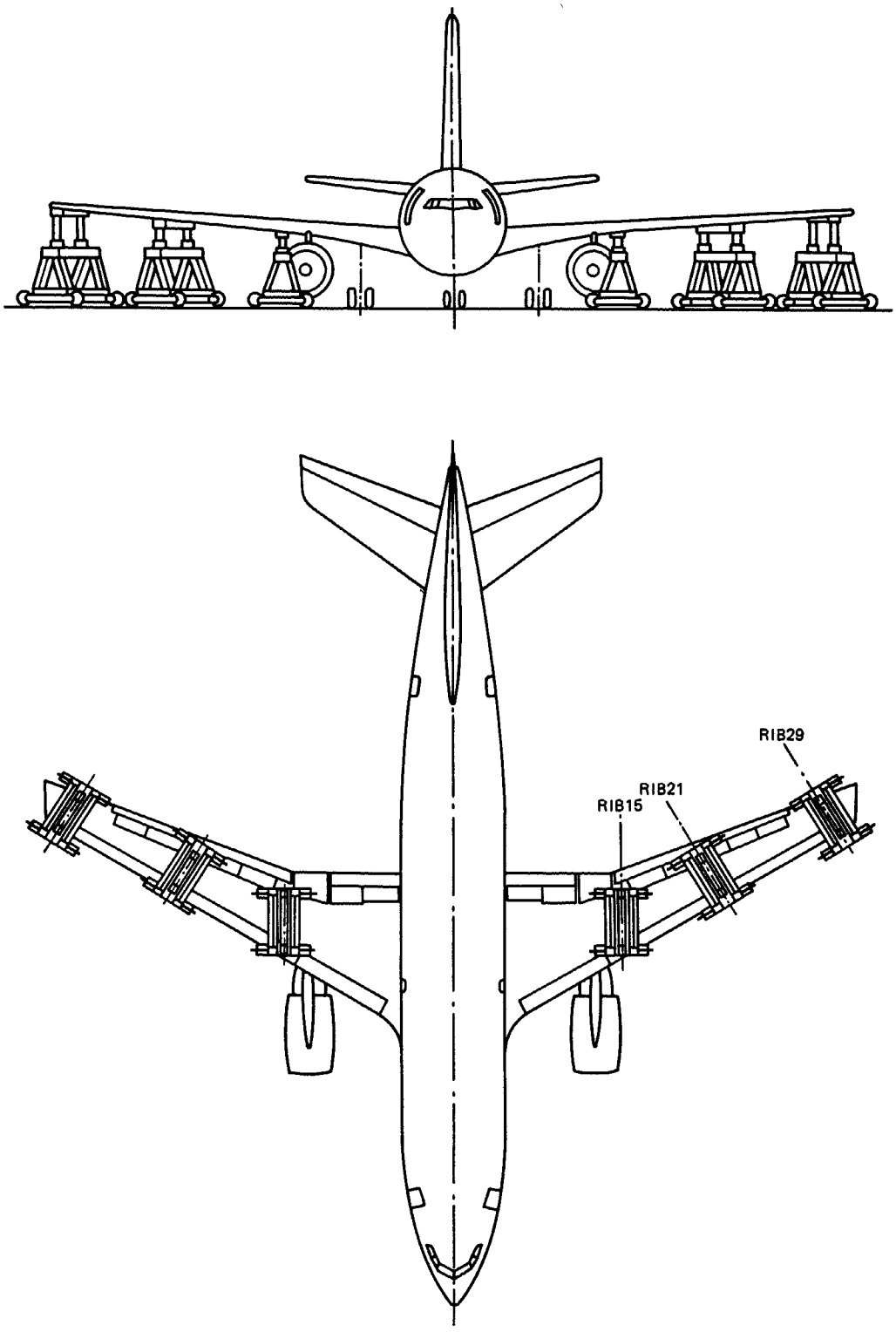
NOTE: DIMENSIONS IN THE TABLE ABOVE ARE APPROXIMATE AND WILL VARY WITH TIRE TYPE AND CONDITIONS.

Nose Gear Jack Adapter Location
Figure 004

SHORING

1. General

When it is necessary to support the wing in order to relieve the loads on the structure during accomplishment of modifications or major work three shoring cradles shall be placed under each wing at **STA935/RIB15, STA311/RIB21, STA1787/RIB29**
(Ref. Fig. 001)
Shoring is necessary to support the wing in order to relieve the loads on the sructure when you do major work or modifications.
The **AMM** shoring procedure gives the general principle only.
For detailed instructions, refer to **SRM (Ref. SRM 51-51-00, P. Block 1).**



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Location of Shoring Cradles under Wings
Figure 001

EMERGENCY LIFTING AND SHORING

1. General

Lifting and shoring procedures for rapid removal of disabled aircraft from airport operating areas are contained in the **AIRPLANE RECOVERY MANUAL (ARM).** Should any lifting procedure outside the scope of normal jacking (Ref. 07-11-00 and 07-20-00) be required, cross-reference shall be made to this manual. The Content of the ARM is as follows :

- **GENERAL AIRPLANE INFORMATION**
- **DAMAGE AND TERRAIN SURVEY**
- **WEIGHT AND CG MANAGEMENT**
- **REMOVAL OF PAYLOAD**
- **DEFUELING**
- **RETURN OF AIRPLANE TO RUNWAY (AIRCRAFT UNDAMAGED)**
- **TETHERING**
- **LIFTING DAMAGED AIRPLANE**
- **MOVING DAMAGED AIRPLANE**
- **TOWING AND WINCHING**
- **TOOLING AND EQUIPMENT**